PROCEEDINGS OF THE ASSOCIATION OF INDUSTRIAL MEDICAL OFFICERS

The 59th meeting of the Association was held in the Lecture Theatre of the London School of Hygiene and Tropical Medicine. On April 28, 1950, the second biennial John C. Bridge memorial lecture entitled “Doctor and Workman” (see page 105) was given by Dr. Andrew Meiklejohn, Reader in Industrial Health at the University of Glasgow.

On April 29 a symposium was given on “Occupational Dermatitis”. The first speaker was Dr. M. W. Goldblatt, Medical Officer, Industrial Hygiene Laboratories, Imperial Chemical Industries Ltd., who spoke on the problems of dermatitis in the chemical industry.

Dr. Goldblatt summarized the changes and development in the chemical industry during the last 30 years. The effect of these had been the almost universal application of chemical methods and products in industries of the most varied kinds. The result was that the industrial worker found himself exposed to a greater extent than ever before to a multiplicity of complex hazards to which his organism had somehow to adapt itself. That such adaptation did occur in the light of the nature of the properties of the elements and compounds used was one of the extraordinary facts of cellular adaptability. Adaptability to environmental factors might seem to depend upon the peculiar factors fell within the range of so-called natural phenomena the wonder of the process did not strike us too forcibly. But when the environmental factors were manifestly not of the “natural” kind and this applied, par excellence, to complex synthetic organic compounds which had no counterpart (at least as far as could be seen at present) in nature, the fact of adaptability was almost unbelievable.

The impact on the skin was immediate and found expression in the so-called direct and indirect irritations. Of the direct irritations there was little more to be said, in general, than that the effects were substantially independent of the individual, that they were understandable on physico-chemical grounds of reaction, oxidation, reduction, lipoid solvency. The normal tolerance to alkalies of any individual skin depended upon the available skin acidity and intolerance resulted from deficiencies of this factor. Sensitivity to alkalies was probably not an immunity reaction in the sense usually assumed. Intimate and repeated contacts with lipoid solvents or detergents, by removing the superficial film of fatty material on the skin, lay bare the unstable stratum corneum with a consequent more ready exposure of the subjacent layers to the insults of the external world and to the industrial products that could establish sensitization.

The mechanism of sensitization dermatitis is obscure. In spite of the large list of industrial materials (especially in the organic field), to which the skin might become sensitized, there were many problems to be resolved before real knowledge could be claimed. For example: What was the precise meaning of contact? To what extent was slight injury required to permit contact sensitization? If the process depended upon antigen-antibody reaction, what was the nature of the antigen? What changes did sensitizing compounds undergo in the skin? What fundamental chemical or physical property was required to render a substance a sensitizer?

Dr. Goldblatt, in reference to the process of spontaneous desensitization, described his own experience of workers engaged in the manufacture of antimalarial compounds. Here the incidence of sensitization dermatitis was notably high and spontaneous desensitization could be demonstrated in a high proportion of patients who had only been allowed to continue at work (during the War when manpower was very short) with minimal mild therapy. The re-establishment of sensitization after a prolonged period of absence from exposure was readily observed. The possible relation of this phenomenon to the negative phase in anaphylaxis was referred to.

Polyvalent sensitivity might present peculiar features. The case was described of a woman research chemist who, in 1923, at the age of 24 years, suffered a severe attack of dermatitis after handling 1.2.4 chlor-dinitro-benzene. After 20 years on library work involving no contact with organic reagents, she returned to laboratory work in 1943, and, in the course of work involving the use of 1.3.4.-chlor-dinitro-benzene (absolutely free from the 1.2.4. isomer), she immediately reacted with an extensive irritant, itching, vesicular eruption which led to great loss of sleep. This case illustrated the inability of the skin to distinguish two close isomers and the maintained sensitivity to a particular kind of chemical compound after many years.

Photographs were shown of a worker who, knowing from experience some ten years previously that he was extremely sensitive to 1.2.4 chlor-dinitro-benzene, and having been given, during the War, a job not involving any contact with this compound, deliberately assured
himself of contact with it and received compensation for a long time for the resulting severe and generalized dermatitis.

Emphasizing the need for every industrial medical officer to take the broadest view of research and not to regard the latter merely as a laboratory activity, Dr. Goldblatt described cases of extensive depigmentation in Negroes arising both in industry (in the U.S.A.) and in private life (in Britain). Both groups of cases offered a rare combination of opportunities for clinical and laboratory work. Both series arose from the intimate contact with the skin of rubber articles of clothing (industrial rubber aprons and gloves and rubber-lined shoes) which contained anti-oxidant compounds which, by inhibiting the dopa oxidase reaction which is an essential step in the formation of melanin, prevents the replacement of the pigment in the pigment layer.

"The Differential Diagnosis of Occupational Dermatitis" was the theme chosen by Dr. R. M. B. MacKenna.

Dr. MacKenna stated that the views of industrial medical officers and dermatologists concerning contact dermatitis tended to differ slightly because, whilst the medical officers saw many cases in which the eruption was due only to primary irritants, and several cases in which resistance to sensitizing agents was rapidly acquired, the dermatological clinics tended to receive as patients many difficult, chronic cases which, because of polyvalent sensitivities, and psychological or other causes, were extremely resistant to treatment. Dermatologists also saw cases in which the diagnosis was in dispute, and therefore he proposed showing a series of coloured lantern slides* of some of the maladies which might be confused with industrial dermatitis.

He then discussed briefly the manifestation on the hands of acrodermatitis perstans acrosclerosis, erysipeloïd, erythema multiforme, nummular eczema, lichen planus, lupus erythematosus, self-inflicted injuries, pityriasis rubra pilaris, psoriasis, ringworm, scabies, secondary syphilis and other maladies, comparing these with a few photographs of true contact dermatitis.

In the discussion which followed he said, among other things, that he was convinced that, although it was impossible to calculate the wastage by sickness which had been prevented by the activities of industrial medical officers, he was convinced that if their work ceased suddenly the sickness and accident rates of industrial workers would very rapidly rise.

Dr. Sibyl Horner spoke on "The Prevention of Occupational Skin Conditions".

Dr. Horner stressed the need for measures to prevent the onset of occupational dermatitis and quoted figures of compensated and benefited cases for 1948, pointing out the drain on manpower that such numbers involved.

The substitution for known skin irritants by something more innocuous is the counsel of perfection in the prevention of dermatitis but this is seldom practicable. The selection of workers who will have to be exposed to skin irritants is desirable and a history of eczema or dermatitis is important, whether or not it has occurred during occupation. The presence of skin disease in a candidate for work in which there is a dermatitis hazard does not however necessarily debar him from such employment, for although acne vulgaris would seem to be a condition possibly unsuited for exposure to agents such as mineral oil, pitch, tar and the chlorinated naphthalenes which cause aceneiform eruptions on the exposed parts of the skin, such a subject may well thrive in contact with a trichlorehylene degreasing bath, or other degreasing agents, from which the ichthyotic subject is generally best excluded.

A negative patch test is not quite conclusive and positive tests may in some instances be misleading. Protection of workers is important: something more is required than special clothing, and the aim must be essential mechanical protection by satisfactory environmental conditions at work. Barrier creams play a small but important part in the prevention of dermatitis, although recent work of the Industrial Medical Research Unit of the M.R.C. at the Birmingham Accident Hospital has endorsed the view previously held that the efficacy of barrier creams in protecting the skin from contamination from mineral oil is not high. A cleanser composed of 50% soap powder and 48% wood flour is favoured by Dr. Cruickshank. A cleanser composed of 98%, neutral sulphonated castor oil with 2% wetting agent, such as alkyl sulphate, has proved of practical value and does not "de-fat" the skin.

Routine inspection of the workers should be carried out in order to detect early signs of skin irritation, and the removal from the skin by harmless methods of traces of skin irritants at the end of a day's work is essential. Reduction of dermatitis calls for the blending of effort of employer, industrial doctor, and employees, while, in the words of a French proverb, "the past and the present blend to make the future".

Following these papers there was a discussion in which Dr. Davidson, Principal Medical Officer of the Ministry of National Insurance, took part.

Dr. Davidson pointed out that none of the speakers had defined what he meant by "occupational dermatitis". To obtain benefit under the Industrial Injuries Act a case of occupational dermatitis must be accepted as falling within the definition "inflammation or ulceration of the skin produced by dust, liquid or vapour or radiant energy". The words "produced by" are not further defined: it might be that a case of dermatitis, not primarily occupational in origin but worsened or rendered incapacitating by conditions of work, had been partly "produced by" the agents stated. Figures for successful claims might, therefore, be misleading.

Dr. Davidson gave examples of what was meant by "loss of faculty" under the Industrial Injuries Act, and drew attention to the mode of assessing disablement resulting from occupational dermatitis. He spoke strongly about the difficulty of arriving at a true diagnosis when expert dermatologists differed, and deprecated the free use by dermatologists of such vague and meaningless phrases as "permanent sensitivity to chemicals" and "permanent sensitivity to paints". Dr. Davidson

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* Lent by St. John's Hospital for Diseases of the Skin.
felt also that for dermatologists to offer an opinion on the percentage assessment of disablement when asked for an opinion on diagnosis, and without stating their basis for comparison, was not helpful.

Asked why the Ministry of National Insurance did not notify employers in every case of a successful claim to injury benefit for occupational dermatitis, Dr. Davidson pointed out that this would involve a breach of confidence as well as much added clerical work (perhaps impossible in mid-winter) and that since diagnosis was subject to a series of appeals, the ultimate diagnosis in any given case (although not the benefit payable) might not be available for a very long time.

**London Group**

*Chairman*: Dr. M. L. Dobbie-Bateman, Messrs. Harrods Ltd., Knightsbridge, S.W.1.

*Hon. Secretary*: Dr. R. E. W. Fisher, Chief Medical Officer, Metropolitan Division, South Eastern Gas Board, 589, Old Kent Road, S.E.15.

A meeting of the London Group was held on February 9 at the London School of Hygiene and Tropical Medicine.

A film entitled "Industrial First Aid" made by T. J. Smith & Nephew and directed by Dr. R. A. Trevethick, of Steel, Peech & Tozer, was shown. Dr. Trevethick introduced and explained the film. After the film there was a general discussion in which a number of members took part.

A meeting was held on May 11 at the Luton and Dunstable Hospital and at the Vauxhall Motor Company's works at Luton. At the Luton and Dunstable Hospital Mr. L. W. Plewes, the orthopaedic surgeon in charge of the Rehabilitation Centre explained the method of working of his department. The department comprises, as well as complete and up-to-date physiotherapy arrangements, a workshop where men are treated by being employed on actual industrial work. The work is provided by arrangement with firms in the neighbourhood. The men attend at the Centre either as in-patients or out-patients. Work is so arranged that the movements required are those which are necessary to the patients' recovery. The work is paid for at normal rates by the firms which provide it, but the money, which of course is small because the men are in general capable only of a little work, is retained by the Hospital in a special fund. Mr. Plewes and the engineers in charge of the workshop demonstrated many ingenious devices designed to ensure the correct movements.

At Vauxhall Motors Dr. A. R. Thompson, Medical Officer to Vauxhall Motors Limited, gave a talk on the theory and practice of the Vauxhall re-training shop: this is essentially a shop where the principles in use in the workshop of the Luton and Dunstable Rehabilitation Centre are applied to the work of Vauxhall Motors. Dr. Thompson made it clear that the rehabilitation scheme was dependent upon the close cooperation of the industrial medical officer, the orthopaedic surgeon, the re-training shop superintendent, and, last but most important, the patient. After Dr. Thompson's talk lunch was served to the members by courtesy of Vauxhall Motors.

After lunch a film describing the work of the re-training shop was shown. The members then had an opportunity to inspect the work of the re-training shop and found that the principle of rehabilitating men on actual industrial work was being applied with considerable skill and ingenuity. A great deal of informal discussion took place and it was evident that the members were much impressed with what they had seen.

After tea the meeting concluded.

**Merseyside Group**

*Chairman*: Dr. E. Holland, Mersey Docks Medical Services, Dock Office, Liverpool, 3

*Hon. Treasurer*: Dr. F. A. Wilson, Alfred Holt & Co., India Buildings, Liverpool, 2

*Hon. Secretary*: Dr. F. H. Tyer, Lever Brothers, Port Sunlight Ltd., Port Sunlight, Cheshire.

Mr. Evans gave a talk on prolapsed intervertebral discs. This diagnosis he said was being made with increasing frequency nowadays, and the condition was usually the cause of what was formerly labelled primary sciatica. The original diagnosis of rupture or herniation of an intervertebral disc was made by radiograph, after injection of lipiodol into the spinal theca, and later aerography had been used. Both these methods had now been abandoned, and a typical clinical syndrome was now recognized.

The lesion was most commonly found between L. 4 and 5, or between L. 5 and S. 1. A typical history showed the following features:

**Distribution and Type of Pain.**—The pain begins in the lumbo-sacral region, and spreads down the buttock and the posterior or postero-lateral aspect of the thigh into the calf, but rarely into the sole.

**Factors Influencing Severity of Pain.**—Pain was always aggravated by movement, and relieved by complete rest, especially when the hip and knee of the affected side were flexed and the other leg extended.

**Intermittency of Symptoms.**—There was frequently a previous history of similar attacks.

**Paraesthesia.**—Usually pins and needles aggravated by the same factors as produced pain.

**History of Trauma.**—This was given by 50% of cases.

**Mechanism of Production of the Lesion.**—Typically, this consisted of trauma, produced by attempts to extend the flexed spine against resistance coupled with a rotary movement of the spine. Spinal flexion
produced slight separation of the posterior margins of the vertebral bodies; contraction of the crura of the diaphragm by respiratory effort then fixed the bodies of L. 1, 2, and 3. The disc bulged below this level, and extension and rotation then tipped the protruding disc.

**Physical Signs.**—The sex ratio of males to females was 4:1, and the average age of incidence 35. There was frequently emotional instability. The spine was quite often rigid, and might be tilted and convex to the painful side. The tension test was positive i.e., pain is produced by flexing the hip with the knee extended when the patient lies supine. There is diminution of tone in the glutea and the dorsiflexors of the foot. The knee jerks are normal, and the ankle jerks diminished or absent on the affected side. Radiographs might reveal scoliosis, obliteration of the lumbar lordosis, and diminution of the disc space. The principal conditions to be excluded in the differential diagnosis were metastases, tuberculosis, and spondylitis.

**Treatment.**—The vast majority of cases responded well to rest and physiotherapy. Spontaneous cure was frequent. Economic circumstances might prevent a patient from having a complete rest for a long period, and, for such patients, the head suspension plaster jacket was of great value as it permitted him to return to work while still under treatment. Its effect was to change the relationship of the spine to the disc, and to immobilize the spine. If cure did not occur after three months in plaster, the jacket was replaced by a removable pexaloid jacket, which was worn for 18 months to two years.

**Operative Treatment.**—This gave good results in a small number of carefully selected cases.

Laminectomy was now seldom performed, the more usual operation being foraminotomy, which consisted in removal of the ligamentum flavum with a small portion of the laminae, exposure and removal of the disc.

Indications for operation were a cauda equina lesion, a recurrent attack after adequate conservative treatment, gross sensory or motor changes of long duration, and sometimes a first severe attack where on economic grounds a rapid cure was necessary.

Mr. Evans stressed that not all heavy work places the nucleus pulposus in jeopardy. Workers often discovered for themselves trick movements which minimized the strain of lifting, e.g., miners with pit trams.

During the rehabilitation period, when patients first returned to work, any weight-lifting done should be from knee level only.

At the conclusion of the talk, a selection of cases was demonstrated, some of whom had been treated by operation, others awaiting operation, and some treated conservatively.

Dr. Douglas Freshwater, consultant dermatologist, demonstrated cases of pityriasis rosea; haemangiomata; button epithelioma; erythema annullare centrifugum; erythema induration; cheiropompholyx due to external irritant; low-grade infective seborrhoeid; acne excoriée de jeune fille; mild occupational dermatitis; accessory auricle; nummular eczema; parakeratosis mibele of penis.

After the demonstration a discussion on the differential diagnosis of industrial dermatitis took place.

The I.C.I. film on industrial dermatitis was shown for the benefit of the members who had not had an opportunity of seeing it at the recent London meeting of the Association.

In the evening a dinner was held in the Bridge Inn, Port Sunlight, at the invitation of Messrs. Lever Brothers. The chairman, Dr. Holland, expressed the thanks of the Group to Dr. Freshwater for his excellent demonstration, and to Messrs. Lever Brothers, Port Sunlight Ltd. for their hospitality.

**North Western Group**

Chairman: Dr. R. S. F. Schilling,
University of Manchester,
Manchester, 13.

Hon. Secretary: Dr. G. Taylor,
Messrs. A. V. Roe & Co. Ltd.,
Greengate, Middleton, Manchester.

A meeting of the North Western Group was held at Manchester on March 8 when a series of papers was read on radiation medicine.

Dr. E. F. Edson, Principal Medical Officer, Ministry of Supply (Division of Atomic Energy Production), opened the discussion and pointed out that there were both analogies and differences between the orthodox industrial toxicology and the toxicology of ionizing radiation. Attention was drawn to the importance of establishing permissible concentrations of radio activity in the occupational environment which were in almost every case far lower than those recommended for orthodox non-radioactive toxic hazards in industry.

Dr. Felton dealt with the acute and chronic clinical consequences of external and internal radiation, at dosages and dosage rates vastly in excess of current recommendations for occupational exposure, based on the history of the radium and x-ray industries and the military and therapeutic usage of radiation. The changes which took place were protean: blood, skin, gonads, eyes, lungs, bones, gastro-intestinal tract, liver and kidney might all be involved.

Dr. A. Butterworth followed with a discussion on possible lines of therapy for the conditions mentioned if by mischance they did arise. Amongst a large number of substances which had been tried experimentally only toluidine blue, protamine sulphate, "rutin", blood transfusion, and antibiotics had any likelihood of frequent success. Theoretically, the pharmacological removal of heavy elements was feasible since their behaviour often simulated that of calcium in the body. The practical value of measures for decalcification was, however, dubious and in general the entire picture of specific therapy for the clinical consequence of excessive irradiation or deposition of radio elements was a depressing one.
Dr. A. S. McLean concentrated upon the haematological aspects of over-irradiation with special reference to the diagnostic value of blood counts on radiation workers. The difficulties of assessing the significance of changes noted in the minor degrees of over-exposure was indicated. Dr. McLean thought that the value of blood count procedures in persons exposed to radiation within permissible levels was perhaps more likely to be of psychological value than as a measure of health surveillance. However, this aspect could be reversed if one considered the necessity to avoid employment on radiation work of persons with existing blood disease, or the occasional possibility of over-exposure occurring but not being recorded by the personal monitoring devices, or the technical fallibility of determinations of certain injurious radio elements in the occupational environment.

Dr. T. E. Graham described the possible structure and role of an industrial medical service in radiation industrial establishments, as exemplified by that of the Division of Atomic Energy (Production Factories). The health supervision of radiation risks must not be carried out to the exclusion of more orthodox and accepted needs of employees for the promotion of their occupational health and wellbeing. Pre-employment medical examination was required before employment in the Division of Atomic Energy, and particular attention was paid to the organs or tissues thought most prone to injury by radiation, e.g., bone, bone marrow, blood-forming tissues, lung, kidney, skin, and especially to possible pre-malignant conditions. The examination included a chest radiograph and one or more routine blood counts. Annual clinical examination and chest radiograph followed, and blood counts were carried out every six months or more frequently. A final examination preceded any employee leaving factory employment. The medico-legal aspects were, in all examinations, borne in mind as well as the purely medical ones.

A dental service for the factories was also run, based on the known predisposition of pre-septic or septic dental states to lead to bone changes in the jaw from radio-element deposition. A chiropody service paid attention to the potential foot trouble arising from the necessary wearing of rubber boots in the many radiation process areas of the factories.

Great importance was attached to the factory casualty service and on injury assessment and injury prevention arrangements. Collaboration between the medical and safety staff was a daily feature of the preventive health measures. Accurate records were maintained of all relevant occupational health data on all employees with the intention of eventual periodic analysis of the data. Information was currently lacking on the progressive health trends in employees exposed for lengthy periods to radiation or radioactive substances. The medical officers found serving on factory committees as observers or advisers of great value. The health and safety services received early opportunities of advising the designers on special points to be considered when a new process or operation had to be converted into plant and building. The medical authorities stipulated the maximal allowable concentrations of permissible exposures for various operations.

Mr. W. Lunning, physicist in charge of the Health and Safety Physics Department at one establishment, dealt with the role of that Department in the interests of the safety and health of the employees. Control of external radiation by "Beta" and "Gamma" radiation was possible either by absorbing the radiation energy in an inert barrier of suitable dense material such as lead, concrete, iron, brickwork, etc. or by increasing the distance between the worker and the source, or by restricting the time permitted for work on the particular operation. Control of internal radiation amounted to controlling the amount of radioactive contamination of the working air and environment with particular attention to dust. The degree of attention to hazard control demanded intensive radiation surveying and atmospheric contamination assessments carried out both as a regular routine and also on suspicion of unusual occurrences. For the measurement of individual exposures, a sensitive photographic film worn for a stipulated period was used. Where the result was required quickly, the issue of a small pocket ionizing chamber was arranged. Atmospheric dusts were collected by filtration or electrostatic precipitation, and could then be assessed by chemical methods or by radiometric counting.

Scottish Group

Chairman: Dr. A. F. Campbell,
Albion Motors Ltd.,
South Street, Glasgow, W.4.

Hon. Secretary: Dr. I. M. Richardson,
Stewarts & Lloyds Ltd.,
Tollcross, Glasgow, E.2.

A meeting was held on April 20 at the Airdrie Factory of Boots Pure Drug Company Ltd. Members were welcomed by Dr. Lloyd Davies and Dr. Hunter, and, after inspecting the health unit, they were conducted round the works.

Later Dr. Lloyd Davies gave an address in which he described his own concept of the future of industrial medicine.

The annual business meeting was held on May 24. The Secretary gave his report and the financial statement. Members expressed dissatisfaction with the present financial policy of the Association preferring a return to the block grant system. The Secretary was asked to report this to the Association treasurer and to have it raised at the next Council meeting.

A letter from Dr. Mekelburg was read requesting possible speakers and subjects for the London meetings. After discussion, the following suggestions were made:
Dr. George Buchanan to give his observations on Dupuytren's contracture in dockers; Dr. Swanston to take part in a Symposium on "How is the Industrial Injuries Act Working?"
The last item on the agenda was the syllabus of meetings for 1950-1951. This was duly approved, and after a speech of congratulations from the Chairman to Dr. Meiklejohn on his Bridge Lecture, the proceedings closed.

**South Wales and West of England Group**

*Chairman*: Dr. J. Gwynne Morgan,  
Chief Medical Officer, Mond Nickel Works,  
Clydach, Swansea.

*Hon. Secretary*: Dr. T. H. Jenkins,  
Divisional Medical Officer, National Coal Board,  
Institute of Engineers, Park Place, Cardiff.

A general meeting was held in the lecture theatre of the Mining Department, University College, Cardiff, on April 27, 1950, when Dr. J. P. Bull, Assistant Director of the Industrial Medicine Research and Burns Unit, Birmingham Medical Research Council, gave a lecture on infection with special reference to the hands and feet. After the lecture a sound colour film on "Wound Infection" was shown, followed by a most interesting discussion.

Dr. Bull spoke on the studies of infection made by the M.R.C. Industrial Medicine Research Unit in respect of the engineering industries in the Midlands. He thought the findings might have wide application to other industries.

As regards fungal infections of the feet, limited studies so far had shown that this was less widespread than had been anticipated. Secondary coecal infection was common and might determine exacerbations and require treatment before fungicides could be effective.

Studies of sepsis showed that though it accounted for perhaps less than 2% of factory surgery attendances, it caused between 10 and 30% of lost time accidents and a corresponding proportion of time loss. Of recent industrial fatalities in Birmingham, 6% were attributable to sepsis. In finger pulp and tendon sheath infection a controlled trial of systemic penicillin, combined with careful minimal surgery, had demonstrated its value.

Reference was made to the recent M.R.C. Special Report No. 266 by Williams and Miles. The no-touch technique shown in the film was a logical and practical outcome of these studies. Intelligent layout of dressing stations as described in the April, 1944, issue of the *British Journal of Industrial Medicine* was a further help. Infection between dressings could readily occur when a "dry dressing" became soaked. Waterproof and impermeable dressings were a partial answer, but had disadvantages. Recent experiments with a nylon film dressing, which permitted the wound to be seen and had other advantages over the usual adhesive dressings, were promising.

Members asked Dr. Bull a number of questions, and an interesting discussion ensued.

**Tees-side Group**

*Chairman*: Dr. W. Gillies Annan,  
41, Cleveland Road,  
Darlington, Co. Durham.

*Hon. Secretary*: Dr. J. B. Adamson,  
Ministry of Fuel and Power,  
Crown Buildings,  
63, West Gate Road,  
Newcastle on Tyne, 1.

A meeting was held on May 11, 1950, at Stockton and Thornaby Hospital. Eight members and four visitors attended the meeting, and after the business part of the meeting two films, produced by the film unit of Imperial Chemical Industries Ltd., were shown.

The first film, entitled "Birth of a Drug," showed the various steps by which a new drug comes into being: discussions between chemists on various chemical formulae; the making of various substances with trials on animals; the finding of a substance suitable for trial on human beings; cooperation of a physician in testing the drug; and finally, when it has been proved to be of value in the treatment of a disease, the manufacture of the drug on a commercial scale.

The second film, entitled "Industrial Dermatitis," began with a description of the skin and went on to show how the various hazards in industry could disturb the proper functioning of the skin and so lead to dermatitis. Examples of industrial dermatitis were shown and steps to be taken to avoid it discussed.

**Yorkshire Group**

*Chairman*: Dr. C. Cresdee,  
I.C.I. Ltd. (Dyestuffs Division),  
Huddersfield.

*Hon. Secretary*: Dr. B. P. R. Hartley,  
Samuel Fox & Co. Ltd.,  
Stocksbridge Works, Nr. Sheffield.

The group met on February 16, 1950, at Scunthorpe, Lincs. where they visited selected departments of the Appleby Frodingham Steel Company.

First visited was the south melting shop, the most modern in the Empire, comprising two 380-ton Siemens open hearth furnaces of the tilting type and a mixer. Members were impressed with the spaciousness of the layout and evidence of good housekeeping. Subsequently the new section mill was visited, and members saw the rolling down of steel ingots into smaller sections. The chief impression gained in this completely mechanized mill was of the few personnel who seemed to be required to operate it. The main hazards of the heavy steel industry are accidents and the long term effects of exposure to high temperatures in a dusty atmosphere. In both shops visited these hazards were reduced to a minimum by good working conditions.

Later in the medical department Dr. F. A. Shackleton...
showed a case of scleroderma, and Dr. O. P. Llewellyn reviewed a selection of chest radiographs showing all stages of silicosis and other chest disorders.

A meeting was held on May 11 at Salts Mill, Saltaire, Shipley. This worsted mill deals with all processes "from the sheep's back" to the finished cloth. The founder of the firm was a pioneer in many ways. He built his mill in sylvan surroundings and away from the depressing conditions in Bradford, and a model village, the first of its kind, for his employees. The mill was established in 1853, but has been extensively modernized.

Members were shown all processes from sorting the wool to the finished cloth, including the complicated machinery for combing the wool and spinning.

The medical officer, Dr. W. Ward Smith, showed members the medical facilities which included the services of a visiting ophthalmic surgeon, dental surgeon and chiropodist, for whom adequate accommodation and equipment were provided.

Woollen mills do not have the condition of high humidity and temperature found in cotton spinning mills, and in this case the working environment, though warm, was not uncomfortable despite the fact that it was a hot day. The hazards of the industry are those associated with moving machinery, and contact dermatitis due to alkalies and other processing solutions used. In the mill visited the incidence of accidents and dermatitis was very low.